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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/025,313	12/18/2001	Kenneth A. Ullrich	ULR 302A	8052

23581 7590 02/09/2007  
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EXAMINER
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MEI, XU

ART UNIT	PAPER NUMBER
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2615

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/09/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/025,313	<b>Applicant(s)</b> ULLRICH, KENNETH A.	
	<b>Examiner</b> Xu Mei	<b>Art Unit</b> 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 November 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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**DETAILED ACTION**

1. This communication is responsive to the applicant's amendment dated 11/17/2006.

***Claim Rejections - 35 U.S.C. § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petersen (US-5,282,251) in view of Abbeloos (US-4,124,249).

Regarding claims 1 and 3-4, Petersen teaches an assistive-listening system (Fig. 1) for use with sound-producing equipment (a TV or a record or cassette player or other device, the TV is used as an explanation example hereinafter) that produces sound for hearing-impaired listeners and normal-hearing listeners; see col. 1, lines 7-8 and col. 2, lines 20-22; the sound-producing equipment including a signal source (the TV have an audio signal

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source) and first (speaker system of the TV or the TV speaker(s)) and second sound sources (speakers 5 or 6 of Fig. 1) operatively associated with the signal source and configured to produce sound corresponding to signals received from the signal source (TV received audio signal), the assistive-listening system comprising: a volume control operatively associated with the signal source (volume control for the TV) and configured to proportionally change the volume of both the first and second sound sources (the volume of the TV controlling both the TV speaker(s) and speaker 5 or 6 when speaker 5 or 6 with audio wire is plugged into the sound reproducing device or TV); and a support structure configured to support and position the second sound source (up rights 2 or 18 for supporting and positioning the second sound source, i.e., speaker 5 or 6) so that a hearing-impaired listener may listen effectively to sound controlled by the volume control without disturbing normal-hearing listeners (see col. 3, lines 17-30).

What does Petersen not teach is the assistive-listening system with the support structure positions the second sound source (speakers 5 or 6) is directed vertically from above (as per claim 3) or within six inches

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(as per claim 4) of the hearing-impaired listener's head without touching, such that sound is directed generally downward onto the hearing-impaired listener.

However, Petersen teaches the assistive-listening system with the support structure positions the second sound source (speaker 5 or 6) is moveably attached to its bracket and the hearing-impaired listener is able to adjust the position the second sound source, i.e., speaker 5 or 6, to produce the desired direction of the audio signal (see col. 3, lines 3-8 and lines 17-20). And Abbeloos teaches a sound assistive-listening system which including a supporting structure 20 positions the second sound source (speakers 32) generally directed vertically from above the listener's head without touching, such that sound is directed generally downward onto the listener when he/she is lying down (see Figs. 1 and 3). It would have been obvious for one of ordinary skill in the art to combine the teaching of Petersen and Abbeloos to improve the versatility of the assistive-listening system by enabling the listener freely adjusts the second sound source to desired or optimal position which is directed generally vertically from above the hearing-impaired listener's head or within six inches (as per claims 4) or

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any other distance from the listener's head when the listener is lying down. The sound generated by the speaker is inherently directing downward onto the listener when the second sound source is positioned above the listener's head as shown in Fig. 3 by Abbeloos.

Regarding claim 2, Petersen teaches the support structure (up rights 2 or 18) of the assistive-listening system positions the second sound source such that it's closer to the hearing-impaired listener than the first sound source (impaired-hearing listener sits in his/her chair with the assistive-listening system with the second sound source, i.e., speakers 5 or 6 that is closer to he/she than the first sound source, i.e., the TV speaker, see Fig. 1).

Claim 6 is similar to claims 1-2 except for being couched in method terminology; such methods would be inherent when the structure is shown in the references.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combinations of Petersen and Abbeloos as applied to claim 1 above, and further in view of Phillips (US-4,210,784).

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Regarding claim 5, Petersen teaches the assistive-listening system is provided for allowing a hearing impaired person to hear the audio portion of a program, without having to turn up the volume of the audio sound to a level to interfere with the comfort of the other listener (col. 3, lines 23-30) without specifically point out the second sound source including a second volume control configured to change the volume of the second sound source without affecting the volume of the first sound source. Phillips discloses a speaker system (see Figs. 13 and 15) including a second volume control (140) configured to change the volume of the second sound source (12a, 12b) without affecting the volume of a first sound source (132a, 132b). To further improve the assistive-listening system taught by the combinations of Petersen and Abbeloos with a separate volume control for the only the second sound source, as shown by Phillips, in order to have a more user friendly system which also enable the hearing impaired listener adjusts the volume of his/her own speakers (i.e., the second sound source) thus without bother others would have been obvious for one of ordinary skill in the art.

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5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xu Mei whose telephone number is 571-272-7523. The examiner can normally be reached on maxi flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Xu Mei  
Primary Examiner  
Art Unit 2615  
01/30/2007